LAC-IEE-14-45

ENVIRONMENTAL THRESHOLD DECISION

Activity Location:	Paraguay
Activity Title:	Improved Water System for Vulnerable Populations
Activity Number:	TBD
Life-of-Activity Funding:	$786,321
Life-of-Activity:	FY 2014 – FY 2017
IEE prepared by:	Shirley Zavala, Mission Environmental Officer, USAID/Paraguay
Reference ETDs:	USAID ODP DGP IEE FY 0813 (Programmatic Initial Environmental Examination (PIEE) for Office of Innovation and Development Alliances (IDEA) Local Sustainability Division (LS) Development Grants Program - DGP)
Recommended Threshold Decision:	Categorical Exclusion Negative Determination with Conditions
Bureau Threshold Decision:	Categorical Exclusion Negative Determination with Conditions

Comments:

A **Categorical Exclusion** is issued to the following Improved Water System for Vulnerable Populations activities (as described in Table 1: Components and Activities without potential environmental impacts in the attached IEE)**:**

1. To Strengthen the FEPAJUS

1.1 Members of the Federation trained to impact public policies.
1.2 Creation of new Community Water Board Associations where needed
1.3 Trained Trainers to install human capacity building
1.4 Installation of Supply and Service Center
1.5 Members of the Federation visited successful experiences within the Latin American region.

2. To Consolidate the Efficient Management Model of Community Water Boards
2.1 Baseline completed to evaluate the performance of Community Water Boards
2.2 Strengthened Community Water Boards in Canindeyu
2.3 Community Water Boards in Canindeyu including all members of the Federation gained access to the equipment and materials needed.
2.4 Systematization of the Model through Manual of Good Practices elaborated
2.5 Members of Community Water Boards in Canindeyu visited successful experiences within the country.

3. To Raise Community Awareness About the Use of Water
3.1 Communities received information on the use of water and on the role that they play

This Categorical Exclusion is issued pursuant to 22 CFR 216.2(c)(2):

(i) Education, Technical Assistance or Training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.);

(iii)Analysis, studies, academic or research workshops and meetings;

(v) Document and information transfers;

(xiv) Studies, projects or programs intended to develop the capability of recipient countries to engage in development planning, except to the extent designed to result in activities directly affecting the environment (such as construction of facilities, etc.)

A **Negative Determination with Conditions** is issued to the following Improved Water System for Vulnerable Populations activities (as described in Table 2: Components and Activities with some minor potential environmental impacts of the attached IEE):

Use of Water:
2. To Consolidate the Efficient Management Model of Community Water Boards
2.2 Strengthened Community Water Boards in Canindeyu

Training Related Activities:
1.1 Members of the Federation trained to impact public policies,
1.3 Trained Trainers to install human capacity building,

2.2 Strengthened Community Water Boards in Canindeyu

Equipment and Material:

2.3 Community Water Boards in Canindeyu, including all members of the Federation access to equipment and materials needed

1.4 Installation of Supply Center.

Conditions for implementation include:

- The Improved Water System for Vulnerable Populations program will integrate water supply, sanitation and hygiene promotion throughout its activities as per USAID's *Sector Environmental Guidelines: Water Supply and Sanitation* (http://www.usaidgems.org/Sectors/watsan.htm)

- An Environmental Mitigation and Monitoring Plan and Report (EMPR, see attached) will be prepared by the implementer. The mitigation and monitoring measures must be budgeted for in the design of the activity, and the implementer is obligated to fund these as part of the activity in question. Moreover the implementer will have a trained environmental compliance specialist to oversee environmental mitigation and monitoring.

- **Small-scale infrastructure mitigation measures:**
  - All construction activities shall be approved by USAID;
  - All construction activities must adhere to national regulations and seek the appropriate governmental approvals (if needed).
  - All construction activities must comply with USAID Sector Environmental Guidelines for small-scale construction.
  - Promote the environmental sound design and planning in the process to identify areas where to expand or establish new Community Water Boards.
  - This planning shall avoid the construction of infrastructure in areas of special conservation (near water surfaces, protected areas, remnant forest areas, wetlands, fragile soils, sloping terrains, etc.)
  - Promote the design of infrastructures improvements in the Water Boards with an appropriate scale and capacity.
  - Promote the minimization of disturbance of native flora, soil and biodiversity during construction phase.
  - Regarding to the use of leaded paintings for refurbishment, promote good practices according to the Environmental Guideline for the Small Scale Construction Sector.
  - Promote the implementation of a monitoring plan of the water quality and good practices in the construction of the infrastructure of protection of wells according to national regulations.

- **Water Supply mitigation measures:**

- All construction activities must adhere to national regulations and seek the appropriate governmental approvals (if needed).
- All activities related to Water Supply must comply with USAID Sector Environmental Guidelines specific for Water Supply and Sanitation, including the promotion of improved hygiene behaviors and ensuring that all households connected to improved water supply have proper sanitation facilities.
- Promote good pricing policies and practices, leading to regulate the excessive use, waste and leakage.
- Promote the design of the water supply systems according to the calculation of yield and extraction rates.
- Promote the assessment of water quality to determine if water is safe to drink and to establish a baseline so that any future degradation can be detected.
- Identify specific mitigation measures for use and for disposal of chemicals for water quality analyzes.

Responsibilities:-

- Each activity manager or **Contracting/Agreement Officer Representative (COR/AOR)** is responsible for making sure environmental conditions are met (ADS 204.3.4). In addition, COR/AORs are responsible for ensuring that appropriate environmental guidelines are followed, mitigation measures in the IEE are funded and implemented, and that adequate monitoring and evaluation protocols are in place to ensure implementation of mitigation measures.

- It is the responsibility of the **Development Objective (DO) Team** to ensure that environmental compliance language from the ETD is added to procurement and obligating documents, such as activity-related Development Objective Grant Agreements (DOAGs) and Modified Acquisition and Assistance Request Documents (MAARDs).

- The **Mission Environmental Officer** will conduct spot checks to ensure that conditions in the IEE and this ETD are met. These evaluations will review whether guidelines are properly used to implement activities under this ETD in an environmentally sound and sustainable manner according to USAID and applicable U.S. Government policies and regulations.

- The implementing **contractor or partner** will ensure that all activities conducted under this instrument comply with this ETD. Also, through its regular reporting requirements, a section on environmental compliance (e.g. mitigation monitoring results) will be included.

<u>Amendments</u>

- Amendments to Initial Environmental Examinations (IEE) shall be submitted for LAC Bureau Environmental Officer (BEO) approval for any activities not specifically covered in the IEE, which include:
    - Funding level increase beyond ETD amount,
    - Time period extension beyond ETD dates (even for no cost extension), or
    - A change in the scope of work, such as the use of pesticides or activities subject to Foreign Assistance Act sections 118 and 119 (e.g. procurement of logging equipment), among others.
- Amendments to IEEs could include a recommendation for a positive determination and an Environmental Assessments (EA), and approval of these documents by the LAC BEO could require an annual evaluation for environmental compliance.

Victor H. Bullen Date July 24, 2014
Victor H. Bullen
Bureau Environmental Officer
Bureau for Latin America & the Caribbean

Date _____
Victor H. Bullen
Bureau Environmental Officer
Bureau for Latin America & the Caribbean

Copy to: Fernando Cossich, Mission Director, USAID/Paraguay
Shirley Zavala, MEO
Adriana Casati, PO
Elisa Zogbi, PT
Marco Ferreira, PRG
Charis Nastoff, RAO

Copy to: Paul Scmidtke, Joe Torres, Acting REAs

Copy to: Dora Plavetic, Mike Karbeling, LAC/SA
Susan Thollaug, Doug Pulse LAC/RSD

Copy to: IEE File

Attachments:
- Initial Environmental Examination

File: P:\LAC.RSD.PUB\RSDPUB\ENV\Reg 216\IEE\IEE14\ LAC-IEE-14-45 ETD (PA – Improved Water System for vulnerable populations).doc

Initial Environmental Examination (IEE)

Activity Location:	Paraguay
Activity Title:	Improved Water System for vulnerable populations
Activity Number:	TBD
Life of Activity Funding:	$786,321
Life of Activity:	FY2014 – FY2017
Reference Threshold Decision:	PROGRAMMATIC INITIAL ENVIRONMENTAL EXAMINATION (PIEE) FOR OFFICE OF INNOVATION AND DEVELOPMENT ALLIANCES (IDEA) LOCAL SUSTAINABILITY DIVISION (LS) DEVELOPMENT GRANTS PROGRAM (DGP)
IEE Prepared by:	Shirley Zavala, EG Officer/MEO
Date Prepared:	7/16/2014
Recommended Threshold Decision:	Categorical Exclusion, and Negative Determination with Conditions.

1. BACKGROUND AND ACTIVITY/PROGRAM DESCRIPTION

1.1 PURPOSE AND SCOPE OF IEE

This is an Initial Environmental Examination (IEE) prepared in accordance with USAID Environmental Procedures 216, ADS Chapter 204 Environmental Procedures, and USAID/Paraguay MO# 2011-02 Environmental Procedures, for the new program "Improved Water System for vulnerable populations".

The performance period for this program is August, 2014 to September 30, 2017, to cover the 3-year period of implementation through FY17.

The Programmatic DGP IEE was intended to review the overall activities that will be undertaken by Missions via DGP Awards with the assistance of the Office of Innovation and Development Alliances(IDEA) Local Sustainability Division(LS), and provide a threshold determination on the overall DGP at the program level. The previous programmatic PIEE for the DGP was approved in September 2008. The renewed programmatic PIEE for the FY14-FY19 DGP programs is an umbrella PIEE covering activities that could be funded with DGP funds that can be categorically excluded from environmental review, and requires further environmental review for those projects that cannot be categorically excluded.

Based on environmental review procedures, the DGP Programmatic IEE recommended the following environmental determinations:

1. A **Categorical Exclusion** was recommended for the activity classes listed below, which could be implemented under variety of program areas. These fall under the following citations from Title 22 of the Code of Federal Regulations, Regulation 216 (22 CFR 216), subparagraph 2(c)(2) as classes of activities that do not require an initial environmental examination:

(i) education, training, technical assistance or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.);
(ii) controlled experimentation exclusively for the purpose of research and field evaluation and carefully monitored;
(iii) analyses, studies, academic or research workshops and meetings;
(v) document and information transfers;
(xiv) Studies, projects or programs intended to develop the capability of recipient countries and organizations to engage in development planning except to the extent designed to result in activities directly affecting the environment (such as construction of facilities etc.).

For specific projects that the Mission believes may qualify for these categorical exclusions, the Mission must provide a recommendation as to the applicability of these categorical exclusions to the Bureau Environmental Officer (BEO) prior to obligating funds into a DGP award. The BEO will verify the applicability of categorical exclusions to the proposed activity, and will provide email confirmation of categorically excluded activities. No further environmental evaluation is required provided that the activity remains within the scope of the approved categorical exclusion(s).

2. **Negative Determination with Conditions** is recommended under 22 CFR 216.3 (a)(2)(iii) for those projects or initiatives that do not qualify for the above-listed categorical exclusions.

a. A supplemental IEE (SIEE), or Environmental Assessment, must be submitted through the Mission's usual environmental procedures for activities not qualifying for the above listed categorical exclusions.

b. The SIEE or Environmental Assessment will contain environmental conditions appropriate to the specific activity being performed.

This new IEE is prepared by USAID/Paraguay as a supplemental IEE to the "Programmatic Initial Environmental Examination (PIEE) for Office of Innovation and Development Alliances (IDEA) Local Sustainability Division (LS) Development Grants Program (DGP)", to implement a new project in the Water Supply sector in Paraguay with funds from DGP during the period FY2014 – FY2017.

1.2 BACKGROUND

Strategy framework

USAID/Paraguay's CDCS focuses on improving equality and democratic governance for all Paraguayans. This program area aims to improve economic growth and build the capacity of local governance systems, principally on the Northern Zone Departments of San Pedro, Amambay, Concepción, and Canindeyú, where most of the poorest populations inhabit.

Complementing its main program for economic development based on the inclusion of small-scale producers into sustainable value chains, USAID also want to support local organization´s strategic initiative -such as water access- toward improving the quality of life of poor communities within these areas.

Our approach is that access and governance of potable water systems incorporates a sustainable, community-led management model and addresses the transparent administration and delivery of potable water services for vulnerable population.

This approach also aims to strengthen technical knowledge, financial sustainability, and infrastructure capacities of local communities to effectively manage their own water systems. The specific categories of assistance targeted under this program include; access to potable water in rural and semi-urban areas for use in households, schools, and health facilities; and improved water utility operations and service delivery through strengthening corporate governance and management of utilities, private sector participation, and demand management Increased mobilization of domestic public and private sector financing for water and sanitation sector development.

Based on this statement, the program to be funded under this new IEE corresponds to tree Sub-Elements of the USAID Water Supply and Sanitation "F Framework", with activities specifically focused on the "supply" component:

***Sub-Element 3.1.8.1 - Safe Water Access*:** Increase access to water of appropriate quantity and quality for use in households, schools, health facilities, and industrial/commercial facilities through protection of existing water sources, sustainable development of new sources (e.g., well drilling and spring capping); expansion and rehabilitation of water supply infrastructure, such as pumps and distribution systems;

implementation of appropriate community-based approaches to design, construction, operation and maintenance.

Sub-Element 3.1.8.3 - Water and Sanitation Policy and Governance: Improve policy, laws, and regulations to expand service delivery and treatment, and to ensure national standards for tariff setting, licensing, benchmarking, and performance monitoring. Improve water utility operations and service delivery through strengthening corporate governance and management of utilities, private sector participation, and demand management; achieving cost recovery tariffs while addressing affordability and access issues; and increasing operating efficiency to achieve economies of scale as well as responsiveness to users. Promote appropriate involvement of various users of water (domestic supply, industrial users, agriculture) in decision-making so that all sectoral interests have access to and ownership of water resource management decisions.

***Sub-Element 3.1.8.4 - Sustainable Financing for Water and Sanitation Services*:** Increase mobilization of domestic public and private sector financing for water and sanitation sector development and increased access to services. Develop financially sustainable options for wastewater treatment.

Context Background and Rationale

Safe and quality water provision is fundamental for the life and health of people. Although Latin America is the region with more abundance of fresh water, around 50 million people lack access to safe water. In order to supply access to water to their communities, people have work together and formed organizations along the continent to articulate the solution to this problem with the public and private sectors. There are approximately 77,000 Community Water Service Organizations (OCSA in Spanish) that provide water services to 40 million Latin Americans, and whom represent an access opportunity to 18 million more. Besides providing water, OCSAs promote democratic values, foster female leadership, and contribute to the protection of the environment and the rational use of water. They also help reduce sources of contamination that cause diseases like diarrhea and cholera in children and adults.

In Paraguay, although it is one of the richest countries in water resources, 48% of the population lacks access to water systems. According to local experience, the most commonly affected by this situation are vulnerable groups- particularly women and young girls, since they are in charge of the domestic role in the society. They are also the ones who have less involvement in the decision-making processes affecting their household provisioning activities; including decisions regarding water resource management, which is an essential resource for sustaining life.

SENASA (*Servicio Nacional de Saneamiento Ambiental*), is an institution that depends from the Health Ministry; it was created in 1972 with the mission to expand water services in communities with less than 10,000 habitants- strengthening in this way Community Water Boards (*Juntas de Saneamiento*).

Community Water Boards are constituted under the same law that creates SENASA (*Ley 369/72: Crea el Servicio Nacional de Saneamiento Ambiental dependiente del Ministerio de Salud Pública y Bienestar Social*), and decree #8,910 of 1974 which establishes its creation and functions. Community Water Boards are nonprofit community organizations with legal registration, which are constituted by community residents who are users or beneficiaries of the Community Water Board services.

Community Water Boards are organized in regional Association of Community Water Boards in order to gain representation. In turn, these regional Associations come together and form the Paraguayan Federation of Community Water Boards Association, known as the FEPAJUS, to gain national representation. The FEPAJUS then represents Community Water Boards through the Associations, whose main function is to ensure the interests of the community water and sanitation sector. The FEPAJUS was created in 2006 by the need to visualize a sector that has been disorganized for a long time and under the exclusive control of SENASA. Today, the FEPAJUS is still weak because off the very weakness of Community Water Boards and Associations that make up the structure of the organization.

In Paraguay, 19.8% of the population receives water from more than 3,000 Community water boards, regulated by the Government through the official Regulatory Agency for Sanitation (ERSSAN in spanish).

The community water sector in Paraguay is characterized by a large number of small Community Water Boards whose incomes are not enough to make them sustainable: 60% of these Boards have less than 100 water connections, and 87% do not surpass 300 connections. The Governmental policy focuses on creating new Community Water Boards, but not on investing in the maintenance and expansion of the best managed systems. However, there are several successful experiences at the global and regional level that have resulted in sustainable Community Water Boards.

The project "Improved Water Systems for Vulnerable Populations in Paraguay"

The project seeks to provide access to safe water to more Paraguayans, through a holistic, sustainable and community-led management model, by developing and strengthening people's technical and managerial skills within their Community Water Boards, through education and the appropriate infrastructure capabilities.

Project Hypothesis:

- A strong FEPAJUS and a systematized and efficient management model of Community Water Boards will lead vulnerable populations to gain better access, sanitation and governance of potable water systems.
- Community Water Boards headed by women presents major results and are more likely to be successful; therefore, prioritizing training and motivation of women would lead to a better overall result in the management of sanitation boards.

o A supply center managed by the FEPAJUS will contribute to strengthen the national organization and to strengthen Community Water Boards as the latter will be able to overcome most of its problems accessing to equipment at good prices

To achieve this goal, this initiative will develop activities on two levels: at the National (Federation) and Departmental (Associations) level by 1) Strengthening the Paraguayan Federation of Community Water Boards´ Associations (FEPAJUS in spanish) as the main representative organism bringing together all the Associations of Community Water Boards with representation in all Departments, and by 2) Consolidating the efficient management model of Community Water Boards in Canindeyu as a pilot project.

The direct beneficiaries of this proposal will be FEPAJUS, and also 100 Community Water Boards in the Department of Canindeyu (which cover approximately 40,000 families or 200,000 people when calculating an average of five members per Paraguayan family). The indirect beneficiaries will be 800 Community Water Boards linked to the Federation all over the country, which provide safe water to 320,000 families or approximately 1,600,000 people.

Strengthening the FEPAJUS is important as it appeals to the interests of all Community Water Boards´ Associations, and it will lead vulnerable populations to gain better access, sanitation and governance of potable water systems through public advocacy. At the same time, consolidating the efficient management model of Community Water Boards in Canindeyu (as a pilot project) is important as it will later facilitate the replication of the model in other departments, always promoting gender equality and women's participation.

Canindeyu has been chosen as the location for the pilot project not only because it presents real water needs and inefficiencies in the organization of its Community Water Boards, but also because the Applicant is very familiar with the local communities and their needs as it has been working in the area for more than 25 years.

Although within the functions that should meet Community Water Boards are related to sanitation activities and provision of drinking water in communities, the role of sanitation are not met due to financial and technical constraints of the Community Water Boards. In these areas, the sanitation strategy is through individual solutions as each home builds a septic tank, which is already out of reach for the management of Community Water Boards. In Paraguay only 10% of the population has sewer service.

Thus, the basic infrastructure of the Community Water Boards is dedicated to the service of water supply in these communities. The service is generated in the following manner:

Groundwater captation: The source most common for obtaining water is the artesian well, which has 8 inches of diameter approximately. Its depth can vary by several hydro-geological factors (in Paraguay have been identified wells with a maximum depth of 200

meters). The water is raised with an electric pump (of 10 hp to 25 hp, depending on the flow rate of the well), to a storage tank with an average of 30,000 liters of capacity,

Water storage: water is storage in an elevated tank, choosing a point high enough to install the tank, or if this is not possible or height was not enough, building a foundation for the tank to be elevated about 15 to 20 meters so that the distribution can be effected by gravity. The tank can be made of concrete or metal.

Treatment and Distribution: Water treatment is designed according to the problems that are identified in the water source. In Paraguay, the most common problem is microorganic contamination, which is treated with hypochlorination mechanisms. The water goes through a chlorinator to measure the exact amount of chlorine needed in accordance with the flow, maintaining the water free of contamination in the distribution process. Monitoring the residual chlorine is generally performed at the end of the distribution system - at the supply points. Distribution takes place by gravity through a pipe system comprised of a main line of pipes of ½" which goes in the same line of the roads; and the ramifications of this line are individual connections in each home.

1.3 DESCRIPTION OF ACTIVITIES

The Program Goal is to provide access to safe water to more Paraguayans, through a holistic, sustainable and community-led management model which tackles water provision thoroughly and that can be easily adjusted and replicated in other locations, allowing the expansion of its benefits.

Objective 1: TO STRENGTHEN THE FEPAJUS

Output 1.1 Members of the Federation trained to impact public policies: professional trainers will be hired to train members of the FEPAJUS about advocacy and political lobbying, aiming to strengthen their key role in the management of communal water. Therefore, they will be trained in all relevant fields of efficient management of a Community Water Board with the aim of being able to influence public policy. The outputs for this component will be a strengthened FEPAJUS with ability to influence public policies for improved water systems management.

Output 1.2 Creation of new Community Water Board Associations where needed. The creation of new Associations is a parallel activity which consists in promoting the Associations of the Community Water Boards in regions where they currently do not exist but where they may be successful. There currently exist 13 Regional Associations but there are also places without Associations. Therefore, in addition to promoting the creation of new Associations, ones which already exist will also be strengthened.

Output 1.3 Trained Trainers to install human capacity building: aiming to provide administrative, organizational and technical assistance to the FEPAJUS, members will be trained on the thematic areas presented in 8 modules, and in the use and application of a measurement tool. Trainers will later integrate the Training Center for Leaders of

Community Water Organizations, which is currently being formed parallel to this project. These trainers will be prepared to train Community Water Boards.
The 8 training modules are: 1. The future of our water and environmental community water board; 2. Community organization, management, and leadership; 3. Women´s participation in a Representative Democracy; 4. Learning the administration of our community water board; 5. Learning the laws that regulate our community water board; 6. Water's systems and environmental sanitation, operation and maintenance; 7. Integral management of resources. Health and environmental education; 8. Communication, conflict resolution, and public policy advocacy.
An integral Measurement tool will be designed to identify the strengths, weaknesses, opportunities, and threats affecting the Community Water Boards in the Department of Canindeyu.

Output 1.4 Installation of Supply Center: funds will be devoted to the assembly and operation of a Supply and Service Center. Its location will be determined after conducting a study that will include the visualization of the geographic distribution of the associations and community water boards, and thus will help to locate the Supply Center in a strategic location. The main goal of this Center is to centralize Associations and Community Water Boards' supply and services. The Center will be administered by the FEPAJUS, and all Boards´ representatives will be able to purchase the necessary equipment and supplies at economic prices, thus securing the operation and efficiency of their systems. To ensure the smooth management of the Center, it will have a professional manager and a team according to its needs. The funds obtained with the sales and services provided, will be completely reinvested in the operation of the Center and the FEPAJUS itself, making them sustainable. For that purpose, an Self-sufficiency Plan will be outlined and strictly executed by the FEPAJUS, as part of the technical assistance to be provided by the project. In addition, the Supply Center will act as an educational and training center. It will also provide installation and repairing services when needed. Initially, the Center will acquire equipment and materials from suppliers established in the country and will negotiate best possible prices for these wholesale purchases. Later, the Center may import necessary products as pricing conditions and volumes permit. The project provides seed capital to launch the Center's activities, however through its business model it must become self-sufficient, which is feasible according to the market analysis previously developed.

Output 1.5 Members of the Federation visited successful experiences within the Latin American region: To learn from sustainable experiences of other Latin American second and third level organizations, 2 members of the FEPAJUS will travel to Honduras or Colombia (to be determined at a later date). These two countries have been selected since they are registered and replicable experiences developed in environments very similar to Paraguay, both in urban and rural zones. Managers in those areas will be contacted through the partner AVINA.

Objective 2: TO CONSOLIDATE THE EFFICIENT MANAGEMENT MODEL OF COMMUNITY WATER BOARDS

Output 2.1 Baseline completed to evaluate the performance of Community Water Boards: A detailed diagnosis is required to measure the administrative, accounting, financial, and technical, amongst other capacities of the Community water boards associated to the FEPAJUS. One hundred (100) Community Water Boards will be identified in the Department of Canindeyú, particularly in the area of the Mbaracayu Biosphere Reserve. Once implemented, this instrument will perform an evaluation of the strengths and weaknesses of each the Community Water Board and it will include recommendations in an action plan. The evaluation system used will be an integral system of indicators specifically designed to measure performance aspects of Community Water Boards as a way to concentrate subsequent actions in those areas requiring more consolidation. The general objective of this activity is to promote among Community Water Boards a good management service, through the application of a measurement guide. This tool helps to measure the performance of Community Water Boards by identifying the main axes of intervention, the specific actions in the areas of these axes, and by providing guidance to improve quality in the services provided.

Output 2.2 Strengthened Community Water Boards in Canindeyu: The first action will be the initial diagnosis, followed by the implementation of the 8 training modules, which was previously adapted to the Paraguayan context for the project “Strengthening Females Leaders’ Capacities for Access to Water” funded by UN Women and AVINA. The 8 modules compiled were adapted in order to fit the reality of Community Water Boards in Paraguay from a training manual especially designed for Board members by Consorcio Agua Clara (AVINA-CARE-ECODES).
According the baselines results, the implementation of the 8 modules can be adapted to every particular situation depending on which topics are the most needed or not. It is expected that initial diagnosis and the implementation of the training modules will help to increase capacity of Community Water Boards’ members.
The responsible implementing the 8 modules will be the trainers who were trained in the output 1.3. The idea is to count with those regional trainers to perform this component. Community Water Boards will also receive training in the use of the measuring instrument so they can self-diagnose their Community Water Boards and propose concrete action lines for continuous improvements.

Output 2.3 Community Water Boards in Canindeyu including all members of the Federation gained access to the equipment and materials needed: It is expected that the baseline analysis will show a number of infrastructure and equipment investments required by Community Water Boards in order to provide a more efficient service and eventually increase their customer coverage and contribute, thus, to their financial sustainability. These investments are not limited to the installation of water systems but also basic equipment which will allow incipient Community Water Boards to be operational. For the implementation of this kind of investments, two private financial companies will collaborate with the project: Vision Banco and Fundacion Paraguaya.

These two institutions have social investment programs, through which they will provide "soft loans" to the Boards for their investments.

Output 2.4 Systematization of the model through the manual of good practices elaborated: From the beginning of the Project, the management model will be registered systematically, aiming to facilitate its replication in other areas of the country. This Manual after being reviewed and improved throughout the implementation of the project, will expose the methodology and main intervention areas needed to consolidate Associations and turn them into Boards. This will help to increase the capacity of replication among the 1,200 Boards associated to the Federation, and create an impact at a national level. The goal is to avoid making the same mistakes and instead, learn from past experiences.

Output 2.5 Members of Community Water Boards in Canindeyu visited successful experiences within the country: aiming to learn from successful associative models which have worked in other Departments of the country, a number of members of the Canindeyu Association of Community Water Boards will participate in local trips to learn about those local successfully experiences, which will be identified through both Avina and FEPAJUS.

Objective 3: TO RAISE AWARENESS OF THE VITAL ROLE OF WATER FOT THE COMMUNITY

Output 3.1 Implementation of Awareness Campaign: This action seeks to focus on the importance of the vital and community role of water by providing information to users of Community Water Boards and communities in general in Canindeyu about: water functions, watersheds, aquifers, the value of water, the value of the water service provider, the importance of the Boards participation, and their role etc. It also aims to raise awareness about the importance of the rational use of water and the need to pay for it to reduce waste, pollution, and to make it available to more people.

This awareness campaign will be implemented through a communication campaign wich will use workshops, printed material, radio programs and other media outlets to reach communities. It will count with the collaboration of the students from the Mbaracayu Educational Center (CEM in Spanish), who will be first trained by specialists, and then will fulfill their community extension program by raising awareness of the vital and community role of water. The students themselves (all of them girls between 14 and 20 years old) will be empowered by their extension role and will increase their knowledge about the issue.

By learning the value of the resource, the benefited communities are expected to change their water-use behavior to a more rational one, which will help to secure the existence of the resource in the face of global climate change and the expected droughts.

1.4 LOCATIONS AFFECTED:

Target Landscape: Atlantic Forest

In eastern Paraguay (Oriente), The Upper Parana Atlantic Forest (UPAF) is the western extension of the Atlantic Forest (Bosque Atlantico), which is one of the most biologically diverse habitats in the world. There were once about eight million hectares of the UPAF, but seven million hectares have been converted to pasture and cropland by big landowners. Also, due to the poor living conditions and the lack of alternatives, it is very common that local families and small-scale producer are often forced to sell their land and become peons in these large properties or migrate to bigger villages or cities. Large producers then clear the forest to install production schemes described above. But not only large producers exploit the forest unsustainably, is there also a mere extractive culture –without environmental considerations- as means of livelihood within the indigenous and peasant communities in the area that threatens the ecosystem integrity.

Most of the remaining UPAF exist occurs in small patches that have been severely degraded. In 2005, the Zero Deforestation Law was approved as an emergency measure to slow the rate of deforestation in Eastern Paraguay. The law has reduced the rate of deforestation in eastern Paraguay to 8,000 ha per year. Yet Paraguay has implemented no measures, with the possible exception of approving the Law of Payment for Environmental Service that would prevent the deforestation rate from rising again once the law expires at the end of 2018.

The Project will benefit the Paraguayan Federation of Associations of Community Water Boards and 100 Community Water Boards in the Department of Canindeyu.

The Community Water Boards are located within the buffer área of the Mbaracayu Forest Biosphere Reserve. A region recognized by UNESCO, in 2000 as an área of special conservation in its Man and Biosphere ProgramThe Community Water Boards are located withn the buffer área of the Mbaracayu Forest Biosphere Reserve. A region recognized by UNESCO, in 2000 as an área of special conservation in its Man and Biosphere Program.

The population within the buffer area of the MFBR is calculated in about 45,000 people, mostly peasants and indigenous communities. These families are composed by 6-7 persons in average and they count with around 10 hectares of land of which part of it is still forested but disappearing rapidly. The property of these families are poorly exploited with some subsistence and cash crops in about 2 hectares, but due to the lack of knowledge, basic technology, access to financing and markets, the families' incomes are insufficient to overcome the poverty line.

In this area, most of the families are living below the poverty line and still have remnant forest within their property. So far, they use the forests in an unsustainable way because the most common productive activities are cattle ranching, agriculture, and unsustainable logging.

It is estimated that in the period between 1945 and 1997, about 67,164 km2 of forests in the eastern region were converted into land for agricultural production (Bozzano y Weik 1992). This surface would represent approximately 76.3% of the original forest cover of the Eastern Region, including the Atlantic Forest Alto Paraná (BAAPA) ecoregion where this prject will be held. By 2003 it was estimated that the forest area of BAAPA in Paraguay was reduced to only about 11,153 km2, representing 13.4% of the original area of this ecoregion. (Di Bitetti, Placci y Dietz 2003).

At the departmental level, agricultural and forestry activities have increased considerably. Given that Canindeyú is one of the departments with more forest cover in this region, it is also logical to expect that this growth will be achieved at the expense of these native ecosystems. Lacks of planning and development control have contributed to deforestation, which has reached a rate of 600 ha per year in the area of influence of the RNBM in the period 1997-2002. An important volume, not registered in the national statistics, of roundwood or sawnwood is marketed directly through the dry border with Brazil.

The area where the project will be implemented is located within the Jejui River Upper Basin (CARJ). The two main rivers of this basin are the Jejui-mi in the north and the Jejui guazu in the south. The Jejui-mi river crosses the Mbaracayu Reserve from east to west and has more than 20 tributaries of different orders most of which originate within the protected area. The CARJ is subdivided into 38 subbasin, three of them, exceed an área of 20,.000 has: subwatershed Alta del Río Jejuí Guazú with 25,627 has, Cerro Verde with 21,242 has. and Media del Río Jejuí Guazú with 20,966 has. The smallest subbasins are (less than 2,000 has): Tacuapí with 1,898 has, and Morotí 2 with 1,961 has.

The local aquifer has an average of 700 meters thick, low permeability and a water flow until 10 m3/h. In the northwest the aquifer reaches 600 meters thick and the water flow is 18 m3/h (FMB/BM, 2005).

The climate of the region is typically continental classified by Koeppen as humid subtropical (Cfa). Mean annual rainfall is 1800 mm. It varies throughout the year reaching in the Mbaracayú reserve values higher than 2000 mm (FMB/BM,2005). The two main seasons are the hot and the rainy summer (October through April) and the cold and dry winter (May thorugh September).

According to the Mbaracayú Reserve Management Plan (FMB, 2005), the average annual temperature varies between 21ºC and 22ºC

According to the Soil Survey Map published by the Department of Environmental Management of the Ministry of Agriculture and Livestock in Paraguay, the buffer zone of the Mbaracayú Reserve, 50% percent of the soil in the buffer zone are Ultisols, 10 % are Entisols and another 10% Alfisols.

In terms of soil capacity use is estimated that 60% of the area has moderate limitations which reduce the crop selection. Another 20% of soil present slight limitations for the agrarian production, 15% present severe limitations which does not allow annual crop but can be used for perennial crop and 5% are marginal soils.

Rapid Appraisal Studies in the buffer zone of the reserve stated that remnant forests present a low floristic diversity comparing to the reserve. Nevertheless, the number of bird species is 246. In terms of reptiles the amount of species is about 23. The properties maintain mostly small forest remnants which are mainly secondary forests already intervened by man.

1.5 NATIONAL [OR APPLICABLE] ENVIRONMENTAL POLICIES, PROCEDURES OR REGULATIONS

The national legal framework, since the Constitution, establishes principles of environmental protection, ecological diversity, the diffuse interests of public health and quality of life.

The Constitution (Constitution of the Republic of Paraguay 1992,. Part I Of The Fundamental Declarations of the Rights, Duties Of And Warranties, Title II Of Rights And Duties Of Guarantees, Chapter I The life And Environment, Environment Section II)

Licensing and environmental authorizations:

The Ministry of Environment is the national institution responsible for the administration of major environmental laws. The preparation of environmental impact studies, obtaining the environmental license and compliance with the Environmental Management Plan are the main instruments for the adequacy of the projects to the environmental regulatory framework.

The main regulations related to environmental Licensing Project is Law 294/93 Environmental Impact Assessment and its regulation - Decree 14.281/96, which states that any activity involving negative effects on natural resources and the environment, or require consideration of the environmental variable to be authorized, it may be subject to the requirement of an EIA.

Biodiversity:

The Deforestation Zero Law was passed in 2004 and remains in effect until 2018. In the same year, Paraguay's national legislature approved a National Environmental Policy. The National Environmental Council (CONAM), created by an earlier law, promotes and coordinates environmental protection and biodiversity conservation. The Secretariat for the Environment (SEAM) is responsible for enforcing environmental and conservation regulations. The Deforestation Zero low was recently extended for 5 years until 2018. It prohibits the conversion of forest land in Eastern Paraguay for other uses.

There are general regulations relating to the protection of the Biodiversity, such as:

- Law 422/73 "Forestry"
- Law No. 96/92 "For the Wildlife".
- Law No. 2524/04 "Prohibition in the Eastern Region of Transformation and Conversion of Forest Cover Surfaces" (Zero Deforestation Law)

Water:

The legal framework that directly relate to the subject matter consists of the following laws:

- Paraguayan Civil Code Arts. 2004 to 2014, refer to the issue of water use, conservation and sustainable control.
- The Penal Code in its Article No. 197, Item No. 200, Item No. 212 also criminalizes actions related to water.
- Law 369/72: Creates the National Environmental Sanitation Service (SENASA) under the Ministry of Public Health and Social Welfare, in order to establish direct links with other state institutions and persons in public and private for the performance of their duties. SENASA role is to expand water and sanitation in communities of less than 10,000 inhabitants, promoting continuous improvement of applied technology and strategic management, technical, operational and administrative management of the institution, and the strengthening of sanitation boards.
- The Regulatory Decree No. 8.910/1974, regulates the establishment and functions of the Boards of Sanitation. Importantly, several articles of this Act were repealed, especially those who are opposed to the Regulatory Framework Law No. 1614/2000.
- The Law of Regulatory Framework No. No. 1614/2000, regulates the health services Paraguay and Regulatory Law 18800/2002, by which is regulated and adequately protect the rights, powers and functions as well as the enforcement of obligations by the client service people also holder of providers and ERSSA (Article 5, paragraph c).
- Law No. 3.239/2007 of Water Resources Paraguay. This law is to regulate the sustainable and integrated management of all waters and territories that produce it, whatever their location, physical state or its natural occurrence in the Paraguayan territory, in order to social, economic and environmentally sustainable to do it; also sets as its application authority to the Ministry of Environment (SEAM).
- Act No. 836/1980 of the Health Code, which regulates the functions of the State in the areas of comprehensive care of people's health and the rights and obligations of persons in the field.
- For infrastructure projects, municipal and provincial governments review environmental evaluations and issue certificates and/or permits that facilitate project initiation. The project will ensure that all prospective small infrastructure

projects seek and receive the appropriate approvals required by Paraguayan law and regulations.

2. EVALUATION OF ENVIRONMENTAL IMPACT POTENTIAL

Based on the Full Application of the project, most of the activities are not going to impact negatively the environment or human health in the area of implementation.

Specifically, the following activities will not have an impact on the environment (and can be consider under Categorical Exclusion category):

Table 1: Components and Activities without potential environmental impacts.

1. TO STRENGTHEN THE FEPAJUS	**Illustrative activities**
1.1 Members of the Federation trained to impact public policies.	- Training workshops to members of the Federation Note: The following training modules will be not considered under the Categorical Exclusion: • Water's systems and environmental sanitation, operation and maintenance; and • Integral management of resources. • Health and environmental education
1.2 Creation of new Community Water Board Associations where needed	- Meetings and procedures for registration, to create or consolidate Associations
1.3 Trained Trainers to install human capacity building	-Training workshops for future Trainers. -Training sessions for future Trainers on the performance measurement tool Note: The following training modules will be not considered under the Categorical Exclusion: • Water's systems and environmental sanitation, operation and maintenance; and • Integral management of resources. • Health and environmental education
1.4 Installation of Supply and Service Center	- Meeting and procedures to comply with legal requirements to establish the supply center. - Selection and hiring of personnel for the center. - Training to the personnel to manage the center. - Design an Action and Self-sufficiency Plan - Monitor the implementation of the Plan

1.5 Members of the Federation visited successful experiences within the Latin American region.	-Visits and meeting with successful Community Water organizations/ associations in Latin American region. - Systematization and evaluation of knowledge gained - Workshops and meetings to present and share knowledge to other members of the Federation.
2. TO CONSOLIDATE THE EFFICIENT MANAGEMENT MODEL OF COMMUNITY WATER BOARDS	**Illustrative activities**
2.1 Baseline completed to evaluate the performance of Community Water Boards	- Develop baseline to diagnoses of Water Community Boards in the Department of Canindeyu - Implement the Performance Measurement Tool.
2.2 Strengthened Community Water Boards in Canindeyu	- Workshops to facilitate trainings to Community Water Boards in Canindeyu using the 8 training modules. - Monitoring the implementation of the actions recommended by the performance measurement Note: The following training modules will be not considered under the Categorical Exclusion: • Water's systems and environmental sanitation, operation and maintenance; and • Integral management of resources. • Health and environmental education
2.3 Community Water Boards in Canindeyu including all members of the Federation gained access to the equipment and materials needed.	- Facilitate Boards to access capital for the needed materials and equipment. - Agreements with Vision Banco, Fundación Paraguaya, and others for the provision of soft loans.
2.4 Systematization of the Model through Manual of Good Practices elaborated	- Elaborate a Manual of Good Practices available for all Boards based on the Canindeyu Experience after the end of the project.
2.5 Members of Community Water Boards in Canindeyu visited successful experiences within the country.	- Members of the Canindeyu Association of Community Water Boards visit successful experiences in other departments within the country. - Systematization and evaluation of knowledge - Workshops to present and share knowledge to other members of Boards and Associations.

3. TO RAISE COMMUNITY AWARENESS ABOUT THE USE OF WATER	
3.1 Communities received information on the use of water and on the role that they play	- Communication campaign and workshops to raise awareness about the importance of the rational use of water and the need to pay for it.

Generally all small-scale development activities like water supply, roads, storage facilities, etc., can involve some construction activities (demolition; site-clearing; grading, leveling, and compacting soil; excavating; laying pipe; installing equipment; or erecting structures). USAID constructed facilities, structures, and infrastructure must be designed and constructed to appropriate engineering standards to minimize risk to humans and the natural environment.

The USAID Sector Environmental Guidelines for small-scale construction identify key issues associated with the construction process. Some illustrative impacts that can apply to this project are:

- Damage to sensitive or valuable ecosystems. Construction in wetlands or other sensitive ecosystems may damage natural resources and the benefits they provide.
- Compaction of the soil and grading of the site may alter drainage patterns and water tables, changing access to water, and may degrade water resources as well.
- Sedimentation. Removal of land cover, excavation, extraction of construction materials can cause soil erosion and sedimentation, which may alter capacity of ponds and aquatic resources.
- Contamination of ground and water supplies. Toxic materials used in construction may contaminate ground or surface water supplies, affecting human health and ecosystems.
- Potential Adverse Impacts on Workers. Health and safety risks to construction workers including exposure to toxics such as solvents, lead and asbestos (refurbishment, painting, renovation, etc.)

The USAID Sector Environmental Guidelines specific for Water Supply and Sanitation list some potential environmental impacts from mismanaged projects. Some of these illustrative impacts -and their causes- that can apply to this project are:

- Contamination of water supplies caused by poorly designed or operated sanitation facilities.
- Possible chemical contaminants, especially in groundwater, can lead to serious health problems.
- Construction of facilities in sensitive areas (wetlands, estuaries, etc.) can destroy flora or fauna.
- Improperly designed water-supply can also deplete fresh water, erode soil from pipe leakage, or create poor drainage at taps. Increased consumption of water can reduce water flows.

- Depletion of fresh water sources can occur when projects do not adequately assess the quantity of available surface and groundwater (including typical seasonal and annual variations.).
- Other causes include poor mechanisms for regulating withdrawals and use of water, and insufficient monitoring and maintenance of leaks.
- Overdrawing wells and boreholes can alter groundwater flows, reduce groundwater levels, and cause aquifer depletion.
- Poor design, operation and/or maintenance of water supply improvements can lead to pools of stagnant water near water taps, water pipes and storage tanks.

Based on the revision of the project, the following activities may have predictable and minor impacts on the environment that can be avoided with proper review and oversight:

Table 2: Components and Activities with some minor potential environmental impacts.

SMALL-SCALE INFRASTRUCTURE	Illustrative activities/impacts
1.4 Installation of Supply Center:	This involves renting a space / deposit for the Supply Center. The location of this site should be strategic for the Community Water Boards from across the country. This activity will require minimal adjustments or refurbishment to be used for the supply center. Minor improvements to the infrastructure will probably be needed in order to install the supply center. These activities can have negative impacts if better management practices and environmental considerations are not included in the design, implementation and monitoring process.
2.2 Strengthened Community Water Boards in Canindeyu **2.3 Community Water Boards in Canindeyu including all members of the Federation gained access to the equipment and materials needed.**	The project wills basically perform a diagnosis of Community Water Boards to identify the basic needs for improvement. As a result the Boards will be responsible of any investment in infrastructure and management improvement. Improvements in all aspects will result in a more efficient use of the resource and the reduction of waste water in networks due to the poor condition of the infrastructure. Although the use of water will be more efficient, this may involve minimum adjustments of infrastructure by the Community Water Boards. This could have also indirect effects as increased consumption of water that may involve an extension of the existing infrastructure.

	These activities can have negative impacts if better management practices and environmental considerations are not included in the design, implementation and monitoring process.
WATER SUPPLY	**Illustrative activities/impacts**
Use of water: **2. TO CONSOLIDATE THE EFFICIENT MANAGEMENT MODEL OF COMMUNITY WATER BOARDS** **2.2 Strengthened Community Water Boards in Canindeyu**	The whole project implementation could have as direct result an improved and extended water supply service by the existent or new Water Board. It can also have the indirect effects of increased consumption of water by existent or new beneficiaries. These activities can have negative impacts if better management practices and environmental considerations are not included in the design, implementation and monitoring process.
Training related activities: **1.1 Members of the Federation trained to impact public policies,** **1.3 Trained Trainers to install human capacity building,** **2.2 Strengthened Community Water Boards in Canindeyu**	These components involve the implementation of a package of training workshops during the 3 years of the program. While the general training category may fall within the activities defined by 22CFR216 as "categorical exclusion," these specific training modules could have an indirect impact on the environment, if better management practices and environmental considerations are not included: • Water's systems and environmental sanitation, operation and maintenance; • Integral management of resources. • Health and environmental education
Equipment and Material: **2.3 Community Water Boards in Canindeyu, including all members of the Federation access to equipment and materials needed** **1.4 Installation of Supply Center.**	This two components involve the bidding process for the provision of supply and equipment needed (pipes, pumps, chemical products, hypochlorite, pumps, others). It also implies the installation, operation, and maintenance of the equipment and materials by the Water Boards, and related service by the Supply and Service Center. From the Proposal "FEPAJUS will conduct a series of additional activities to diversify its financial strategy and ensure its sustainability it. These series of activities include: offering services to analyze water quality through Mobile labs". Providing water quality analyzes involves the use of chemicals and disposal of these materials. This activity would need mitigation measures for use and for disposal of chemicals. These activities can have negative impacts if better

	management practices and environmental considerations are not included in the design, implementation and monitoring process.

3. RECOMMENDED THRESHOLD DECISIONS AND MITIGATION ACTIONS

3.1 RECOMMENDED THRESHOLD DECISIONS AND CONDITIONS

Based on the above narrative, USAID/Paraguay recommends the following threshold decisions:

A **Categorical Exclusion**, pursuant to 22 CFR 216.2(c)(2) categories (i), (iii), (v), and (xiv), is recommended for the below list of activities under the following project components as described in the **Table 1: Components and Activities without potential environmental impacts:**

1. TO STRENGTHEN THE FEPAJUS
1.1 Members of the Federation trained to impact public policies.
1.2 Creation of new Community Water Board Associations where needed
1.3 Trained Trainers to install human capacity building
1.4 Installation of Supply and Service Center
1.5 Members of the Federation visited successful experiences within the Latin American region.

2. TO CONSOLIDATE THE EFFICIENT MANAGEMENT MODEL OF COMMUNITY WATER BOARDS
2.1 Baseline completed to evaluate the performance of Community Water Boards
2.2 Strengthened Community Water Boards in Canindeyu
2.3 Community Water Boards in Canindeyu including all members of the Federation gained access to the equipment and materials needed.
2.4 Systematization of the Model through Manual of Good Practices elaborated
2.5 Members of Community Water Boards in Canindeyu visited successful experiences within the country.

3. TO RAISE COMMUNITY AWARENESS ABOUT THE USE OF WATER
3.1 Communities received information on the use of water and on the role that they play

A **Negative Determination with Conditions,** for activities under the follow project components and sub-components as described in the **Table 2: Components and Activities with some minor potential environmental impacts:**

USE OF WATER:
2. To Consolidate the Efficient Management Model of Community Water Boards

2.2 Strengthened Community Water Boards in Canindeyu

TRAINING RELATED ACTIVITIES:
1.1 Members of the Federation trained to impact public policies,
1.3 Trained Trainers to install human capacity building,
2.2 Strengthened Community Water Boards in Canindeyu

EQUIPMENT AND MATERIAL:
2.3 Community Water Boards in Canindeyu, including all members of the Federation access to equipment and materials needed
1.4 Installation of Supply Center.

3.2 MITIGATION, MONITORING AND EVALUATION

To avoid, minimize, eliminate or compensate for environmental impacts for activities with a Negative Determination with Conditions (activities where there are expected environmental consequences), appropriate environmental monitoring and impact indicators should be incorporated in the activity's monitoring and evaluation plan.

An Environmental Mitigation and Monitoring Plan and Report (EMPR) will be prepared by the implementer. The mitigation and monitoring measures must be budgeted for in the design of the activity, and the implementer is obligated to fund these as part of the activity in question.

Small-scale infrastructure mitigation measures:

- All construction activities shall be approved by USAID;
- All construction activities must adhere to national regulations and seek the appropriate governmental approvals (if needed).
- All construction activities must comply with USAID Sector Environmental Guidelines for small-scale construction.
- Promote the environmental sound design and planning in the process to identify areas where to expand or establish new Community Water Boards.
- This planning shall avoid the construction of infrastructure in areas of special conservation (near water surfaces, protected areas, remnant forest areas, wetlands, fragile soils, sloping terrains, etc.)
- Promote the design of infrastructures improvements in the Water Boards with an appropriate scale and capacity.
- Promote the minimization of disturbance of native flora, soil and biodiversity during construction phase.
- Regarding to the use of leaded paintings for refurbishment, promote good practices according to the Environmental Guideline for the Small Scale Construction Sector.
- Promote the implementation of a monitoring plan of the water quality and good practices in the construction of the infrastructure of protection of wells according to national regulations.

Water Supply mitigation measures:

- All construction activities must adhere to national regulations and seek the appropriate governmental approvals (if needed).
- Al activities related to Water Supply must comply with USAID Sector Environmental Guidelines specific for Water Supply and Sanitation.
- Promote good pricing policies and practices, leading to regulate the excessive use, waste and leakage.
- Promote the design of the water supply systems according to the calculation of yield and extraction rates.
- Promote the assessment of water quality to determine if water is safe to drink and to establish a baseline so that any future degradation can be detected.
- Identify specific mitigation measures for use and for disposal of chemicals for water quality analyzes.

Additional Conditions and Responsibilities:

- Each activity manager or **Contracting (or Agreement) Officer Representative (COR or AOR)** is responsible for making sure environmental conditions are met (ADS 204.3.4). In addition, CORs/AORs are responsible for ensuring that appropriate environmental guidelines are followed, mitigation measures in the IEE are funded and implemented, and that adequate monitoring and evaluation protocols are in place to ensure implementation of mitigation measures.

- All activities and sub-activities should shall be designed and carried out in a way that comply with national legislation, including the applicable section of Law 294/1993 on Environmental Impact Evaluations and SEAM's corresponding Regulatory Decree No. 14281/1996, and other relevant legal as mentioned in the section 1.5 NATIONAL [OR APPLICABLE] ENVIRONMENTAL POLICIES, PROCEDURES OR REGULATIONS.

- To ensure compliance with the USAID environmental regulation 22 CFR 216, the Implementing Partner (IP) is responsible for providing to USAID/Paraguay with an Environmental Mitigation Plan & Report (EMPR) with 30 days of activity initiation for all activities falling under the Negative Determination with Conditions threshold decision. The IP shall ensure that appropriate environmental guidelines are followed and that mitigation measures described in the pertinent Threshold Decision for each of these activities are funded and implemented, including any necessary training or capacity building, and adequate monitoring. For activities under Negative Determination with Conditions, appropriate environmental monitoring and impact indicators from the EMPR shall be incorporated in the project monitoring and evaluation plan. The mitigation and monitoring measures must be budgeted for in the design of the activity.

- Applicable best management practices to use within the EMPR process can be found in the USAID's 'Environmental Guidelines for Development Activities in Latin America and Caribbean' available in English and Spanish, and also specific sector

environmental guidance at the following web sites: http://www.usaidgems.org/sectorGuidelines.htm; Sector Environmental Guidelines: Water Supply and Sanitation http://www.usaidgems.org/Sectors/watsan.htm; Small-scale Constructions http://www.usaidgems.org/Sectors/construction.htm

- An amendment of this IEE is required for any activity resulting in policy changes that have the potential to affect negatively the environment, large scale construction and other activities not yet designed and therefore not described in this document.

- The COR/AOR and MEO will be permitted to conduct spot monitoring checks for all of the activities listed in this IEE to ensure that the conditions listed in the IEE, ETD, and EMPR are being followed. The MEO should use the EMPR monitoring form (Table 3) to conduct monitoring of activity mitigation measures.

- The Implementing Partner will ensure that all activities conducted under this instrument comply with this ETD. Also, through its regular performance monitoring and reporting requirements, a section on environmental compliance (e.g. mitigation monitoring results) will be included.

- It is the responsibility of the Contracting/Agreements Officer to ensure that environmental compliance language from the ETD is added to procurement and obligating documents. Language from "Environmental Compliance: Language for Use in Solicitations and Awards…" must be used, as appropriate, in award documents. See: http://www.usaid.gov/policy/ads/200/204sac.pdf

Clearance Page
Initial Environmental Examination (IEE)
Activity Location: Paraguay
Activity Title: Improved Water System for vulnerable populations
Life of Activity Funding: $786,321

Concurrence:

_____ Date: 7/22/14
Fernando Cossich
USAID/Paraguay Mission Director

Mission Clearance:

Elisa Zogbi, PT _____ Date: 7/22/14

Adriana Cassati, PO _____ Date: 07/22/14.

Shirley Zavala, EG/MEO _____ Date: 07/22/2014

Charis Nastoff, RAO APPROVAL BY EMAIL Date: 07/21/2014

Regional Environmental Advisor Clearance:

Joe Torres, REA: *Approval by email (attached)* **Date:** *07/18/2014*

Regional Environmental Advisor Clearance:

Joe Torres, REA: *Approval by email (attached)* **Date:** *07/18/2014*

GUIDELINES FOR IMPLEMENTING PARTNERS ON THE USAID LAC ENVIRONMENTAL MITIGATION PLAN (EMP)

October 28th, 2009

A. Background

All projects funded by USAID must conform to US environmental regulations (22 CFR 216) requiring evaluation to ensure that no adverse environmental impacts result from the projects, that cannot be mitigated. All USAID programs funded through USAID LAC Missions fall under an Environmental Threshold Decision (ETD) designated at the Strategic Objective level. The Environmental Mitigation Plan (EMP), so described by these guidelines, ensures programmatic compliance with 22 CFR 216 by meeting the conditions specified in the applicable ETDs authorized by the USAID Latin America and the Caribbean (LAC) Bureau Environmental Officer (BEO).

Programs implemented by USAID LAC Mission implementing partners (IPs) include a range of discrete-activities under various awards that will likely have a risk for adverse environmental impact. Illustrative discrete activities include building refurbishment and medical waste management. This EMP procedure will provide for both the screening for environmental risk, preparation of a mitigation plan and reporting on monitoring of these mitigation measures, which require that appropriate consideration is given to gender as a social impact factor in the development of a mitigation plan and subsequent measures.

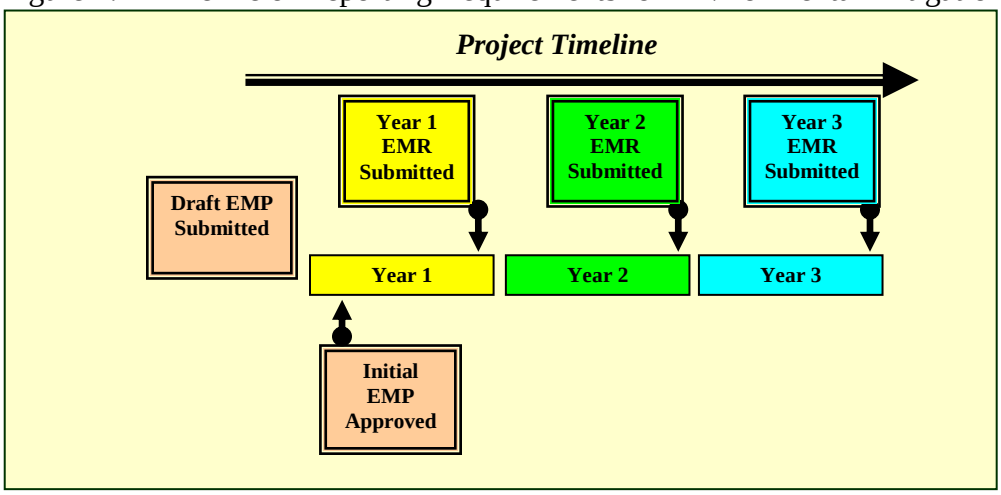
The EMP initially categorizes projects into three types: No Risk, Medium Risk and High Risk. Those with No Risk can continue without further review. Those with High Risk must be reconsidered for the need of an Environmental Assessment. The EMP deals with those projects at Medium Risk (*see Figure 2*).

All grantees/contractors will be required to fill out an Environmental Mitigation Plan per project type that includes:

1. The Environmental Screening Form,
2. The Identification of Mitigation Plan, and
3. The Environmental Monitoring and Tracking Table.

Program managers/CORs and Chiefs of Parties can work with the USAID Mission Environment Officer (MEO) to ensure impacts are sufficiently identified and mitigation actions are agreed upon, including clear guidance on the procedures for gender integration where fitting.

Figure 1: Timeline of Reporting Requirements for Environmental Mitigation



B. Timing of Reporting Requirements

Once a site-specific project has been identified, an initial EMP is submitted by the applicant or contractor to the Contracting Officer's Representative (COR)/Agreement Officer's Representative (AOR). The EMP is reviewed and must be approved by the Mission Environmental Officer and/or Regional Environmental Advisor before commencing activities. For sub grants, the grantee is required to fill out the EMP and submit it for approval to the Chief of Party (COP). The COP then submits the EMP for review and final approval to the COR and MEO. Gender issues must be addressed in the Environmental Mitigation Plan in keeping with the Agency's executive message on gender integration dated May 4, 2009

A format for this initial EMP can be seen in attachment 1; it includes:

- An initial screening process using the "Environmental Screening Form" (Appendix 1, Table 1) to assure the project is at the Medium Risk Level followed by,

- The identification of potential impacts and related mitigation measures using the "Identification of Mitigation Plan" (Appendix 1, Table 2) for each sub-activity.

- The Environmental Monitoring and Tracking Table (Appendix 1 Table 3) that documents the necessary mitigation measures to be monitored, lists monitoring indicators, and includes who will conduct the monitoring when. Table 3 also includes a monitoring chart that documents who conducted the monitoring and the effectiveness of the mitigation measures.

At the end of each year of implementation, the EMP is resubmitted with the same information as provided initially, plus a component reflecting the status of implementation and effectiveness monitoring, of the identified mitigation measures using the "Environmental Monitoring and Tracking Table" (Appendix 1, Table 3). This table will be used for project environmental monitoring and will be submitted to the USAID Contracting Officer's Representative (COR), formerly known as CTO,

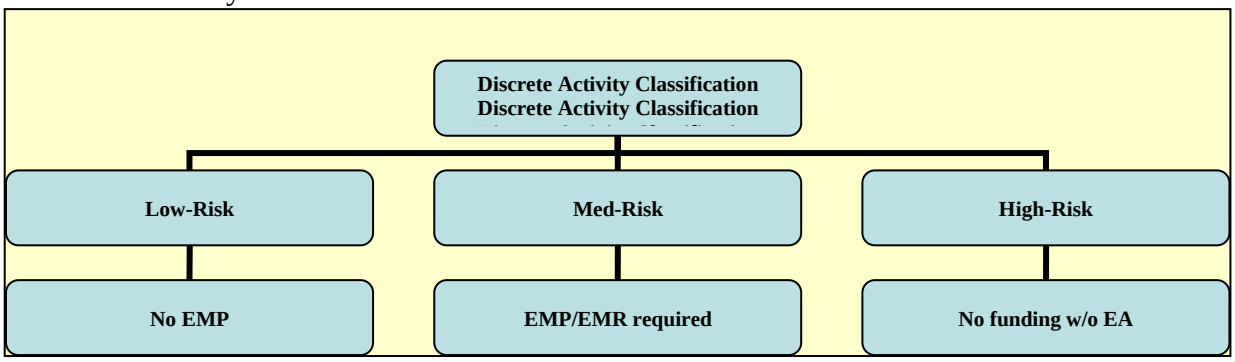
on an annual basis along with the initial EMP as well as a narrative providing details on the mitigation process. The report should not exceed ten pages (excluding annexes).

C. Initial Environmental Mitigation Report

1. Classification of Level of Risk

Components of a program or discrete activities under an award can have varying levels of risk for environmental damage and therefore require different courses of action (Figure 2). No-risk activities, classified under "i" below, do not require the EMP as they already should have been addressed under a "categorical exclusion" determination in the original SO-level IEE and Environmental Threshold Decision or subsequent amendments. High-risk activities ("ii") will have significant environmental impacts that will require an Environmental Assessment (EA) contracted through the IP with MEO consultation to a professional environmental impact assessment organization with final approval by the LAC Bureau Environmental Officer. Such activities are not to be avoided if they meet a crucial need of the community (e.g., solid waste disposal facility, municipal-scale waste water treatment plant). Medium-risk activities ("iii") will require the IP to screen environmental impacts and plan for mitigation of adverse environmental impacts. It is to these medium-risk activities that this EMP guidance primarily applies.

Figure 2: Schematic of required action based on the level of risk of a component or discrete activity under an award.



- Discrete Activities that Do Not Require Mitigation Plans (No-Risk):

An illustrative list of no-risk discrete activities where no mitigation reporting is required includes:

- Education or training*, unless it implements or leads to implementation of actions that impacts the environment (such as construction of schools or use of pesticides),
- Community awareness initiatives,
- Controlled research/demonstration projects in a small area,
- Technical studies or assistance,
- Information transfers.

If there is a risk that the actual implementation of materials learned during training could adversely impact the environment (e.g., training on agricultural techniques), the training is expected to include as part of its curriculum, an analysis of environmental impacts and planning for mitigation.

- Discrete Activities that Cannot be Supported (High-Risk):

Under the environmental regulations of USAID, if there is a discrete activity which is considered critical to the needs of the community that may have a significant environmental impact, such activities will require an Environmental Assessment. In the case of pesticide use a Pesticide Evaluation Report and Safer Use Action Plan (PERSUAP) will need to be prepared by the partner and approved by the USAID Latin America and the Caribbean (LAC) Bureau Environmental Officer (BEO). Such activities include but are not limited to:

- Agricultural, livestock introduction or other activities that involve forest conversion,
- Resettlement of human populations,
- Large water management systems such as dams or impoundments,
- Drainage of wetlands,
- Introduction of exotic plants or animals,
- Permanent modification of the habitat supporting an endangered species,
- Industrial level plant production or processing (this does not include community or regional plant nurseries aimed at restoring areas after fires),
- Installation of aquaculture systems in sensitive lakes, marine waters (not land-based fish ponds),
- Procurement of timber harvesting equipment, including chainsaws,
- Use of pesticides (insecticides, herbicides, acaracides, fungicides),
- Large scale construction in un-degraded land,
- Large scale new construction involving permanent living quarters and/or sanitation facilities,
- Cutting of trees over 20 cm diameter breast height, especially tropical trees, except as needed to control disease or maintain forest health.
- Construction of new roads or upgrading/maintenance of extensive road, fire break or trail systems through un-degraded forest land or natural habitats.

- Discrete Activities that can be Supported if Mitigation Measures are Planned and Implemented (Medium-Risk):

Many discrete activities under an agreement will fall between the two extremes mentioned above and offer some adverse environmental impact that can be mitigated with proper planning. For these activities the Implementing Partner (IP) will be responsible for completing the EMP on an annual basis.

2. Sector-Specific Environmental Screening Form

The Environmental Screening Form contains information relevant to the potential environmental impact over the life of activity to natural resource and communities, local planning permits, and environment and health. If items in the Environmental Screening Form (Appendix 1, Table 1) from Column "A" are checked then items for monitoring and mitigation are to be specified in the "Identification of Mitigation Plan" (Appendix 1, Table 2). The Mitigation Plan simply outlines the plan of action for mitigation of planned activities. The Mission Environmental Officer is to approve these forms, with special attention to those projects with identified impacts (i.e., projects with any check marks in Column A).

For reference on mitigation information on a wide variety of discrete activities, refer to the "USAID LAC Environmental Guidelines". Illustrative sector-specific guidelines include: WHO guidelines for handling and disposal of medical waste, "Low-Volume Roads Engineering: Best Management Practices Field Guide (Keller and Sherar, 2003*)" and* the World Wildlife Fund Agriculture and the Environment handbook.

D. <u>Annual</u> Environmental Mitigation Report

On an annual basis each implementing partner will submit an "Environmental Mitigation Report" (EMR) using the attached EMP Table 3 (Appendix1). The EMR contains information relevant to the potential environmental impact over the life of a discrete activity under an award and includes: A) a copy of the initial EMP completed during the initial project planning (reference section B above); B) the prescribed mitigation measures using the " Identification of Mitigation Plan (Appendix 1, Table 2)"; and C) synthesized data on these mitigation measures collected throughout the year and tracked in the Environmental Monitoring and Evaluation Tracking Table (Appendix 1, Table 3). As it is often difficult to quantitatively measure progress of complex mitigation measures, it is necessary to include inserted digital photos (with relevant maps) to describe progress of mitigation activities.

USAID Mission requires that Implementing Partners clearly demonstrate competence in implementing discrete activities using best management practices which most often will provide the additional benefit of environmental protection. In addition, the mitigation activities should consider the critical importance of integrating gender considerations in all stages of planning, programming, implementation, and monitoring of USAID activities.

<u>Sections of the EMP include:</u>

- EMP Coversheet
- EMP Narrative (to be filled out with project specific information)
- Annexes:
    - Environmental Screening Form (Table 1),
    - Identification of Mitigation Plan (Table 2)
    - Environmental Monitoring and Evaluation Tracking Table (Table 3).
- Photos, Maps, Level of Effort

GUIDELINES FOR IMPLEMENTING PARTNERS ON THE USAID LAC ENVIRONMENTAL MITIGATION PLAN (EMP)

I. Coversheet for ENVIRONMENTAL MITIGATION PLAN (EMP)

USAID MISSION SO # and Title: _____

Title of IP Activity: _____

IP Name: _____

Funding Period: FY_____ FY_____

Resource Levels (US$): _____

Report Prepared by: Name:_____ Date: _____

Date of Previous EMP: _____ (if any)

Status of Fulfilling Mitigation Measures and Monitoring:

_____ Initial EMP describing mitigation plan is attached (Yes or No).

_____ Annual EMR describing status of mitigation measures is established and attached (Yes or No).

_____ Certain mitigation conditions could not be satisfied and remedial action has been provided within a revised EMP (Yes or No).

USAID Mission Clearance of EMP:

Contracting Officer's Technical Representative:_____ Date: _____

Mission Environmental Officer: _____ Date: _____
( )

Regional Environmental Advisor: _____ Date: _____
( )

II. Environmental Mitigation Plan & Report Narrative

Note: summary instructions are in italics and not to be included in the report, but rather should be filled out with project specific information)

Note: Outline to be included in the report is in bold.

1. Background, Rationale and Outputs/Results Expected:

   Summarize and cross-reference proposal if this review is contained therein.

2. Activity Description:

   Succinctly describe location, site details, surroundings (include a map, even a sketch map). Provide both quantitative and qualitative information about actions needed during construction, how intervention will operate and any ancillary development activities that are required to build or operate the primary activity (e.g., road to a facility, need to quarry or excavate borrow material, need to lay utility pipes to connect with energy, water source or disposal point or any other activity needed to accomplish the primary one but in a different location). If various alternatives have been considered and rejected because the proposed activity is considered more environmentally sound, explain these. Describe how gender considerations have been incorporated into the activity. How will gender relations affect the achievements of activity results? How will the activity results affect the relative status of men and women?

3. Environmental Baseline:

   Describe affected environment, including essential baseline information available for all affected locations and sites, both primary and ancillary activities. Describe how the activity will involve men and women who directly affect the environment. Methodologies for data collection and analysis for gender-sensitive implementation and monitoring of activities are encouraged.

4. Evaluation of Environmental Impact Potential of Activities (Table 2):

   As a component of the Identification of Mitigation Plan (Appendix 1, Table 2), describe impacts that could occur before implementation starts, during implementation, as well as any problems that might arise with restoring or reusing the site, if the facility or activity were completed or ceased to exist. Explain direct, indirect, induced and cumulative effects on various components of the environment (e.g., air, water, geology, soils, vegetation, wildlife, aquatic resources, historic, archaeological or other cultural resources, people and their

communities, land use, traffic, waste disposal, water supply, energy, etc.). Indicate positive impacts and how the natural resources base will be sustainably improved.

For example, any activity that increases human presence in an area, even temporarily, will increase noise, waste, and the potential for hunting, timbering, etc.

Evaluating the environmental impact potential of activities must include gender-sensitive indicators and sex-disaggregated data when the activities or their anticipated results involve or affect women and men differently; and if so, this difference should be an important factor in managing for sustainable activity impact.

5. Environmental Mitigation Actions (Tables 2 & 3):

For the Initial EMP: List the mitigation measures in the "Identification of Mitigation Plan" (Table 2) and describe monitoring of these mitigation measures in the "Environmental Monitoring and Evaluation Tracking Table" (Table 3).

For the EMR: Describe status of complying with the conditions. Examples of the types of questions an IP should answer to describe "status" follow.

1) What mitigation measures have been put in place? How is the success of mitigation measures being determined? If they are not working, why not? What adjustments need to be made?

2) What is being monitored, how frequently and where, and what action is being taken (as needed) based on the results of the monitoring? In some situations, an IP will need to note that the monitoring program is still being developed with intent to satisfy the conditions. Alternatively, it could happen that the conditions cannot be achieved because of various impediments.

- GENDER

Integrating gender considerations into all stages of planning, programming, and implementation of development assistance is not only a priority for USAID, but also an essential part of effective and sustainable development. The Automated Directive System (ADS) 201 sets out specific requirements to help ensure that appropriate consideration is given to gender as a factor in development planning at the Assistance Objective and the Intermediate Results level of Assistance Objectives all the way down to the activity level. This programming policy includes clear guidance on the procedures for gender integration where determined to be appropriate. In this regard, gender issues must be addressed in procurement documents and evaluation criteria. Gender equality is a USG-wide priority, and USAID has and will continue to a

take a lead role in that effort. For example, USAID/Environmental Protection Program monitors how men and women will be involved in the process of improving country-specific environmental impact assessment procedures. The Program is documenting gender participation in all of its activities. Whenever possible, gender based differences in roles, attitudes and concerns should also be documented.

III-A. Environmental Screening Form (Table 1)

Name of Activity:_____ Type of Activity:_____ Grantee: _____ Date:_____		Column A Yes	Column B No	Col C If answered yes to Col. A. is it a--?	
				High Risk	Medium-Risk
IMPACT ON NATURAL RESOURCES & COMMUNITIES					
1	Will the project involve construction[1] of any type of structure (building, check dam, walls, etc)?				
2	Will the project involve the construction[2] or repair of roads or trails?				
3	Will the project involve the use, involve plans to use or training in the use of any chemical compounds such as pesticides[3] (including neem), herbicides, paint, varnish, lead-based products, etc?				
4	Involve the construction of repair of irrigation systems?				
5	Involve the construction or repair of fish ponds?				
6	Involve the disposal of used engine oil?				
7	Will the project involve implementation of timber management[4] or extraction of forest products?				
8	Are there any potentially sensitive terrestrial or aquatic areas near the project site, including protected areas?				
9	Does the activity impact upon wildlife, forest resources, or wetlands?				
10	Will the activities proposed generate airborne gases, liquids, or solids (i.e. discharge pollutants)				
11	Will the waste generated during or after the project impact on neighboring surface or ground water?				
12	Will the activity result in clearing of forest cover?				
13	Will the activity contribute to erosion?				
14	Is the activity incompatible with existing land use in the vicinity?				
15	Will the activity contribute to displace housing?				
16	Will the activity affect unique geologic or physical features?				
17	Will the activity contribute to change in the amount of surface water in anybody?				
18	Will the activity deal with mangroves and coral reefs?				
19	Will the activity expose people or property to flooding?				
20	Will the activity contribute substantial reduction in the amount of ground water otherwise available for public water supplies?				
21	Will the activity create objectionable odors?				
22	Will the activity violate air standard?				
ENVIRONMENT & HEALTH					
23	Will the project activities create conditions encouraging an increase of waterborne diseases or populations of disease carrying vectors?				

24	For road rehabilitation as well as water and sanitation grants, has a maintenance plan been submitted?				
25	Will the activity generate hazards or barriers for pedestrians, motorists or persons with disabilities?				
26	Will the activity increase existing noise levels?				
27	Will the project involve the disposal of syringes, gauzes, gloves and other biohazard medical waste?				
28	Is the activity incompatible with existing land use?				
LOCAL PLANNING PERMITS					
29	Does the activity e.g. infrastructure improvements, require local planning permission(s)?			N/A	N/A
30	Does the activity meet the national building code (e.g. infrastructure improvements)?			N/A	N/A
GENDER[5]					
31	Do men and women benefit disproportionately or are involved unequally in the project's activities?				
32	Does the project activity inhibit the equal involvement of men and women?				
33	Are there factors that prevent women's participation in the project?				

RECOMMENDED ACTION *(Check Appropriate Action)*:		*(Check)*
(a)	The project has no potential for substantial adverse environmental effects. No further environmental review is required (Categorical Exclusion). No EMP required.	
(b)	The project has potential for minimal to medium adverse environmental effects, but mitigable environmental effects. Measures to mitigate environmental effects will be incorporated (Negative Determination with Conditions). EMP Required.	
(c)	The project has potentially substantial or significant adverse environmental effects, but requires more analysis to form a conclusion. An Environmental Assessment will be prepared (Positive Determination). No EMP required.	
(d)	The project has potentially substantial adverse environmental effects, and revisions to the project design or location or the development of new alternatives is required (Deferral).	
(e)	The project has substantial and unmitigable adverse environmental effects. Mitigation is insufficient to eliminate these effects and alternatives are not feasible. The project is not recommended for funding.	

1 Construction projects need to be reviewed for scale, planned use, building code needs and maintenance. Some small construction projects, such as building an entrance sign to a park, may require simple mitigations whereas larger buildings will require more extensive review and monitoring.
2 New construction of roads and trails will require a full environmental assessment of the planned construction, i.e. a Positive Determination.
3 The planned involvement of pesticides will trigger the need to develop a Supplemental Initial Environmental Examination that meets USAID pesticide procedures (Pesticide Evaluation Report and Safer Use Action Plan or "PERSUAP") for the project.

4 Any activities the involve harvesting trees or converting forests will require a full environmental assessment of the activity (i.e. Positive Determination).
[5]A positive response to gender questions require follow up only when there are other positive responses on questions 1 – 30, and an EMP is developed.

III-B. Identification of Mitigation Plan (Table 2)

→ Enter the Question/Row # of the potential negative impacts with check marks in Column A (Table 1) and complete table below for mitigation measures to reduce or eliminate the issue. In the Sub-Activity or Component Column, list the main actions to be implemented. Under each action, list the tasks (Steps) that are needed to implement this action.

#	**Sub-activity or component**	**Description of Impact**	**Mitigation Measures**
1	Component 1		
	Step 1		
	Step 2		
	Step 3		
2	Component 2		
	Step 1		
	Step 2		
	Step 3		

* provide overview of measures used from the USAID LAC Environmental Guidelines or other pertinent guidelines, details on exact monitoring plan are illustrated in Table 3, Environmental Monitoring and Evaluation Tracking Table.

III-C. Environmental Monitoring and Evaluation Tracking Table (Table 3).

Type of Project:	
Project Name:	
Implementing Organization:	
Location Name:	
Project Size:	
Nearby Communities:	
Senior Project Manager:	Date:
Monitoring Period:	

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods			Estimated Cost	Results			Recommended Adjustments
			Indicators	Methods	Frequency		Dates Monitored	Problems Encountered	Mitigation Effectiveness	
1							**1**			
							2			
							3			
							4			
2							1			
							2			
							3			
							4			
3							1			
							2			
							3			
							4			
4							1			
							2			
							3			